RECIPE FOR A HEALTHIER DIET

Norwegian Action Plan on Nutrition (2007–2011)

NORWEGIAN MINISTRIES

Preface

This is a short version of the Norwegian Action Plan on Nutrition (200 –2011) Recipe for a healthier diet, which was launched in January 2007.

The Action Plan Recipe for a healthier diet applies to the period 2007–2011 and shall serve as a tool for decision-makers, professionals, experts and others in the public and private sectors and NGOs that play a role in the population's diet.

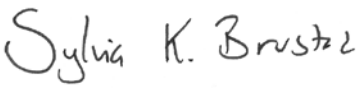
Society has a responsibility for facilitating good dietary habits. To achieve this, many sectors must work together. In all, 12 ministries have therefore collaborated to develop this Action Plan. The plan contains specific measures that will serve to promote health and prevent illness by changing eating habits in line with the nutrition recommendations of the health authorities. Reducing social inequalities in diet is a goal. The measures emphasise contributions that make it easier to make healthy choices, facilitate healthy meals in kindergarten, schools and among the elderly, and increase knowledge about food, diet and nutrition.

The Action Plan is a follow-up of White paper No. 16 (2002–2003) – Recipe for a healthier Norway, and of the political platform of the current government (Soria Moria declaration) signalling a stronger focus on disease-prevention work, physical activity and diet. Also underlying the work on the Action Plan is the World Health Organization Global Strategy on Diet, Physical Activity and Health. The plan must also be viewed in connection with the Nordic Plan of Action for Better Health and Quality of Life through Diet and Physical Activity, adopted July 2006, and the Action Plan on Physical Activity (2005–2009) Working together for physical activity. After the launching of the Norwegian Action Plan for Better Nutrition in the Population, White paper No. 20 (2006–2007) – A National strategy to reduce social inequalities in health, has been presented.

The interaction between the public and private sectors and NGOs provides a foundation for good programmes and measures. Experts, actors in the food industry and other private actors, NGOs and trade unions, university colleges and counties showed great interest in the plan and provided useful input. The dialogue established with various actors in connection with the preparation of the plan will be continued, and good proposals, examples and experiences that have been accumulated will be nurtured in the continuing work.

Oslo, October 2007

On behalf of the cooperating ministries



Sylvia K. Brustad
Minister of Health and Care Services

Ministry of Labour and Social Inclusion
Ministry of Children and Equality
Ministry of Finance
Ministry of Fisheries and Coastal Affairs
Ministry of Local Government and Regional Development
Ministry of Culture and Church Affairs
Ministry of Education and Research
Ministry of Agriculture and Food
Ministry of the Environment
Ministry of Trade and Industry
Ministry of Foreign Affairs

List of abbreviations:

Ministry of Labour and Social Inclusion	MLSI	Ministry of Culture and Church Affairs	MCC
Ministry of Children and Equality	MCE	Ministry of Education and Research	MER
Ministry of Finance	MOF	Ministry of Agriculture and Food	MAF
Ministry of Fisheries and Coastal Affairs	MOFC	Ministry of the Environment	MOE
Ministry of Health and Care Services	MOH	Ministry of Trade and Industry	MTI
Ministry of Local Government and Regional Development	MLR	Ministry of Foreign Affairs	MFA

PART I:
INTRODUCTION

Diet affects our health throughout our life. Nutrition and diet are of crucial importance for growth and development during fetal life and during infancy, childhood and adolescence. Diet early in life affects a person's risk of developing chronic disease as an adult.

The incidence of diseases such as type 2 diabetes, cardiovascular diseases, certain forms of cancer, and osteoporosis are closely linked to the population's diet. Overweight and obesity are increasing as a result of physical inactivity and unfavourable diet, and increasing the risk of other chronic ailments.

Achieving a healthy and varied diet in all segments of the population is a huge challenge. In Norway, as otherwise in Europe, health is inequitably distributed among the social groups in the population, and differences in living habits are one of the reasons. In general, groups with a higher socioeconomic status have , a healthier diet than those with a lower socioeconomic status.

Each of us is responsible for our own health. At the same time we know that individual choice and behaviour are largely affected by social and physical factors. Society has a responsibility to facilitate good health choices in all segments of the population. Facilitating the establishment by children and young people of good health habits, which they can continue into adulthood, is of great importance.

In Norway, the population in general has abundant access to food and, at the outset, excellent opportunities to be able to eat a healthy and varied diet. Developments in the food market are increasing the diversity of products, but can also make it more difficult for people to put together a healthy diet.

Much remains before the diet in all segments of the population meets nutritional recommendations. The diet of many young people and adults still contains too much fat, especially saturated fat, and too much salt and sugar. The consumption of dietary fibre by most people is lower than recommended and some groups get too little vitamin D, iron and folic acid.

Table 1: Dietary content of fat, sugar, fibre and salt compared to the recommended level

	Consumption		Recom. level
	1977–79	2002–04	
Fat (% of calories)	40	34	Approx. 30
Saturated fat (% of calories)	17	14	Limit to 10
Transfat (% of calories)	4	< 1	< 1
Sugar (% of calories)	14	14	Limit to 10
Dietary fibre (g/d)	17	17	Approx. 30
Salt (g/d)		Ca. 10	Limit to 5

Source: Consumer surveys, Statistics Norway and Norwegian recommendations on nutrition and physical activity, Directorate for Health and Social Affairs.

Fat. Today's health problems make it particularly important to follow the changes in our diet's fat content, both with respect to total fat content and type of fat. Milk, dairy products, meat and meat products contribute with a number of important nutrients, but they are also the largest sources of saturated fat in our diet. With a switch in the consumption of meat and dairy products to low fat products, both the total fat intake and percentage of saturated fat will fall. An increase in the consumption of fish and seafood will affect the fat content of the diet in a favourable direction. The use of edible fats also have a major influence on the fat content and composition of our diet. Soft margarine, liquid margarine and cooking oils have a high content of unsaturated fat, and should replace hard types of margarine and butter.

Sugar. High intake of sugar is primarily a challenge among children, adolescents and young adults. The sugar intake of most children and young people is considerably higher than recommended. Most of the sugar comes from soft drinks, squash and sweets. These are food products that should not occupy too large a place in a varied and healthy diet.

Salt. The average intake of salt is estimated to be approx. 10 g per day, but varies greatly from person to person. The health authorities recommend cutting the intake of salt in half. Since almost three quarters of the salt is estimated to come from processed foods, the industry's addition of salt in products and how they label the salt content has a considerable influence on the population's intake of salt.

Fruits and vegetables. These are foods that contain a lot of dietary fibre, vitamins and antioxidants, which in combination have a positive effect on health. The current recommendations from the health authorities are an intake of at least three servings of vegetables and two servings of fruits and berries daily. For adults this is equivalent to a total daily intake of about 750 g. The consumption of fruit and vegetables in particular, is lower than recommended in large segments of the population and should be doubled.

Whole-grain products. Whole-grain bread, whole-grain products, whole-grain flour and rolled oats have a considerably higher content of dietary fibre and necessary nutrients than refined grain products such as white bread and sifted flour. The total consumption of grain has risen in recent years but the percentage for whole-grain flour is stable. Whole-grain flour now accounts for 17 % of the total sales of flour and this percentage should increase significantly in the future.

Fish and seafood. Fish and seafood are important sources of essential nutrients such as protein, vitamin B12, selenium and iodine. Fatty fish contain beneficial fatty acids. Fatty fish and cod liver oil are the most important sources of the long polyunsaturated omega-3 fatty acids and vitamin D, and are beneficial with regard to cardiovascular disease and foetal development. The consumption of fish has increased somewhat in the last 10 years, but is still much lower than before. Children, adolescents and young adults eat substantially less fish than adults, and young women in particular have a low consumption of fatty fish and fish spreads. From a health viewpoint it would be beneficial if the consumption of both lean and fatty fish rises.

Norwegian nutrition recommendations

The health authorities' recommendations on nutrition are based on the existing and collected scientific documentation on the correlation between diet and health. Current recommendations, Norwegian recommendations for nutrition and physical activity issued by the Directorate for Health and Social Affairs provide recommendations for the intake of energy, carbohydrates, fat and proteins, vitamins and minerals for men and women, different age groups and particular groups such as pregnant women and nursing mothers. Separate recommendations have been prepared for infant nutrition. The recommendations have been made on the basis of Nordic recommendations, and are basically in line with published recommendations from the US and WHO.

PART II:
GOALS AND STRATEGIES

Goals

Vision – Better public health through a healthy diet

Main goals of the Norwegian Action Plan for Better Nutrition in the Population 2007–2011

1. To change the diet in line with the recommendations of the health authorities
2. To reduce social inequalities in diet

General goals for dietary changes in the population are as follows:

- that infants are breastfed in line with the recommendations
- increased consumption of vegetables and potatoes, fruits and berries
- increased consumption of whole-grain cereals and bread products
- increased consumption of fish and seafood
- reduced consumption of high-fat dairy and meat products
- reduced consumption of edible fats and a switch in consumption to soft margarines and vegetable oils
- reduced consumption of salt
- reduced consumption of sugar
- reduced consumption of sugary soft drinks and other sweet drinks, sweets, snacks and potato products high in fat

Another general goal is to promote healthy meal habits and water as a thirst quencher.

Quantitative targets for dietary changes

The quantitative targets represent specific targets for changes in the diet over the course of the Action Plan period. While ambitious, it is nevertheless realistic to estimate that these targets can be achieved as an effect of the measures in the Action Plan and ongoing nutrition activities in Norway. The quantitative targets shall be reached without increasing the social inequalities in diet. This means that the improvements shall be largest in the groups where the challenges are the greatest.

Table 2. Quantitative targets for 2007–2011

TARGETS FOR BREASTFEEDING OF INFANTS:

The percentage of infants who are exclusively breastfed at the age of 4 months shall increase from 44 % to 70 %
The percentage of infants who are exclusively breastfed at the age of 6 months shall increase from 7 % to 20 %
The percentage of infants who are breastfed at the age of 12 months shall increase from 36 % to 50 %

20% CHANGE IN THE FOLLOWING TARGETS FOR THE DIET IN THE POPULATION:

Increase the percentage of people who eat **vegetables daily**
Increase the percentage of people who eat **fruit daily**
Increase the percentage of people who eat **fish for dinner at least once a week**
Increase the percentage of people who eat **fish spreads at least twice a week**
Increase the percentage of young people who eat **breakfast daily**

Reduce the percentage of children and young people who eat **sweets daily**
Reduce the percentage of people who drink **soft drinks and squash daily**
Reduce the percentage of people who have **more than 10 % of their intake of calories from sugar**
Reduce the percentage of people who have **more than 10 % of their intake of calories from saturated fat**

Target groups

The purpose of the Action Plan is to improve the diet in the entire population, with particular focus on children, young people and the elderly. Furthermore, the measures shall serve to reduce social inequalities in diet. In planning and implementing measures particular consideration must therefore be taken of the groups in the population that have the least beneficial diet.

Facilitating a healthy and varied diet and physical activity for children and young people is important for preventing illness in the population in the future. Children and young people are in a phase of life where fundamental knowledge, skills and attitudes are established, and the potential for promoting good health and preventing future illness is great.

The elderly need particular attention because they for various reasons are at risk of becoming malnourished. Many lose the desire to eat with advancing age and reduce their food intake as a result of poor appetite. Illness can also affect appetite and food intake. A decrease in intake of calories increases the need for a well-composed diet to meet nutritional needs. Physical activity, good dental health and nutritious and tempting meals in pleasant surroundings are of major significance for fostering a good appetite and adequate intake of food among the elderly. This requires additional efforts towards the elderly who live at home as well as those who live in an institution.

Large groups of the population have a high risk of developing diseases or have diseases where diet is of major importance, such as cardiovascular diseases, cancer, obesity and type 2 diabetes. In the case of some diseases, such as food allergies, a correctly adapted diet is crucial for their treatment. For many other groups of patients, nutrition

plays a key role in avoiding malnutrition and providing a good treatment basis. These groups must be ensured proper dietary advice and dietary therapy.

A large share of Norway's population is affiliated with two cultures. For non-western immigrants, getting established in a new country with a different culture and a foreign language can lead to unfortunate changes in diet along with a lower level of activity. Some immigrant groups have abandoned a varied and high intake of healthy foods such as vegetables, fruits, lentils and beans in favour of foods containing high amounts of fat and sugar. This is reflected in a greater prevalence of certain nutrition-related problems in these groups of immigrants, such as overweight and type 2 diabetes. It is important to take our multicultural society into consideration in implementing nutrition programmes so that the measures will win support and have an impact in groups affiliated with a non-western culture in addition to Norwegian culture.

Strategies and means

To succeed in nutrition work, it is necessary to use several types of strategies and population-wide and individual-based measures at the same time. Population-wide measures must focus on underlying and societal reasons for behaviour, and primarily have as a goal to influence factors in the social and physical environment. The need to use structural means is particularly important with respect to reducing social inequalities in health. In nutritional work it is important to achieve cooperation and collaboration across disciplines and sectors at the local, regional and national level.

The Action Plan emphasises the following five strategies:

1. Improve the availability of healthy food products
Societal-based measures that make it easier for everyone to choose healthy foods will often be the most efficient in improving the general health of a nation. In order to make the healthy choice the easy choice with regard to diet, availability and price of food and beverages are of great importance. Furthermore, marketing regulation, food labelling, regulations in the food area and product development are examples of structural measures which can be used to improve the availability of healthy food products to the population. Working together with the food industry is therefore important.

2. Consumer knowledge
It is a central task for the authorities to reach the entire population with clear, easily understood and uniform

information on diet and nutrition. Widely distributed information and communication will help increase the public's knowledge of food, diet and health, which in turn will serve to make it easier for consumers to make informed dietary choices. To reach out to those who do not actively seek information on diet and health, it is necessary to consider new methods and channels of communication. However, knowledge and attitudes are not sufficient for changing behaviour. Information and educational approaches are likely to have a greater impact at the population level if these approaches are implemented together with structural measures.

3. Qualifications of key personnel
Policy makers and occupational groups who directly or indirectly contribute to nutrition-related activities, and thus have an impact on the population's diet, need to have a sound and relevant level of knowledge about nutrition, diet and food. In order to advance current knowledge about foods, meals, nutrition and health, research should be stimulated. Knowledge about health behaviour and measures to change behaviour are prerequisites for delivering sound and efficient interventions in the area of public health nutrition.

4. Local basis of nutrition-related activities
Anchoring nutrition initiatives politically, administratively and in planning documents in municipalities and counties is necessary for implementing many of the measures. In recent years, partnerships for public health have grown to become one of the most important strategies in public health work. The recognition that lies behind the partnership model is that continuous, binding and systematic interdisciplinary and cross-sectoral collaboration is necessary for achieving good public health. This requires the broad involvement of public, NGO and private activities at the national, regional and local level.

5. Strengthen focus on nutrition in health care services
There is a need to strengthen preventive efforts in the health service because the health service is an important driving force and partner in prevention work. Secondary prevention and treatment take place in both the primary and specialist health services. Nutrition is a required part of prevention, treatment and rehabilitation of disease, as a basis and support for other medical treatment and to ensure that the patient will not become under or malnourished. To provide satisfactory services, there is a need for sound and firmly established structures, systems and tools with regard to nutrition, in addition to ensuring that health personnel have the needed qualifications.

An increasing diversity of food products also increases the need for consumer information. Labelling of food products is important in this context.

PART III:

FOCUS AREAS AND MEASURES

01 COMMUNICATION ABOUT FOOD AND DIET

Information and communication work shall contribute to increase the public's knowledge about food, diet and health. To have an effect, the messages have to be tailored to different target groups with respect to use of inducements and channels. The authorities have a responsibility to provide knowledge-based and easily available information.

The population shall have good access to:
- dietary advice on how to eat a healthy and varied diet
- practical advice on food preparation and general food knowledge
- information on the relation between food and health
- consumer information such as nutritional declaration and labelling

The flow of information about food and diet is large. Much can be gained by good cooperation between authorities, NGOs and the food industry on information measures. This could serve to keep the information provided by the various actors in line with the health authorities' recommendations on nutrition and dietary advice.

Women in general have more knowledge about diet than men, and the elderly have greater knowledge about general dietary advice than younger people. Dietary challenges in the population also vary by social affiliation and ethnic background. Information and communication from the public sector should be more adapted to the different target groups such as sex, age, minority language and various social groups. Reaching the groups that do not already have good knowledge about diet and nutrition, and those who do not actively seek information about such subjects is a special challenge.

SUBGOALS

- strengthen knowledge about food and diet and skills in preparation of healthy food in all population groups
- encourage enjoyment of food and motivate healthful changes in diet
- adapt public information and communication to minority-language and at-risk groups

1. MEASURES AND MINISTRIES RESPONSIBLE

1.1 Develop and implement a comprehensive plan for information and communication work in the nutrition area | MOH, MAF, MOFC, MCE, MER

1.2 Specify the official dietary guidelines | MOH

1.3 Implement campaign for promoting the consumption of fish and other seafood | MOFC, MOH

1.4 Publish a basic cookery book for everyday use in the population | MOH

1.5 Further developing the web site www.matportalen.no with respect to nutrition and diet | MOH, MAF, MOFC

1.6 Awarding of the Nutrition Prize | MOH

1.7 Establish a dialogue forum at the national level between authorities, NGOs and relevant private actors | MOH, MAF, MOFC, MCE, MER

02 HEALTHY FOODS IN A DIVERSE MARKET

Consumption of food changes in accordance with development in the food market and changes in society. Increased trading of food is providing us with access to ever more food products. The demand for food products with health benefits and organic food is increasing. There is also increasing interest in preserving and using traditional food products and dishes. At the same time, the market for fast food in kiosks, filling stations and convenience stores is growing rapidly. There is still a large potential for improvement with respect to offering healthy alternatives to fast food in this market. Consumers are interested in price, availability and quality and are influenced by advertising and marketing. Children who are subjected to marketing of products containing large amounts of fat, salt and sugar have a higher intake of these products than other children.

The population's diet and food consumption largely depends on what the food industry and grocery trade offer. The primary producers, food industry and retailers therefore have an important task in developing and offering foods with a good nutritional profile adapted to various areas of use, arenas and target groups. It is particularly important that bulk commodities – the products we consume in largest amounts – are nutritionally sound. This is particularly important for reducing social inequalities in diet.

The price of food and beverages affects consumption patterns, and thereby has impact on the composition of the diet. How significant price is, depends on the type of food and varies among the different segments of the population. To reduce social inequalities in diet it is necessary to consider use of price and economic means in relation to food prices.

With an increasing range of food products, requirements for knowledge also increase in the population. This is some of the reason why there is great interest in food labelling. Better labelling will make it easier for people to compose a healthy diet.

SUBGOALS

- make it easier for consumers to choose foods with good nutritional composition in order to put together a healthy diet
- better access to and promotion of healthy food products
- reduce the promotion of foods that contribute to a diet that is not healthy, especially among children and young people

The price of food and beverages affects consumption patterns, and thereby has impact on the composition of the diet.

2. MEASURES AND MINISTRIES RESPONSIBLE

2.1 Encourage product development of healthy food products and meals | MAF, MOFC

2.2 Establish a dialogue forum for cooperation between the food industry, authorities, researchers and consumers | MOH, MAF, MOFC, MCE

2.3 Promote increased consumption of fruit and vegetables by stimulating increased access to high quality products from the primary producers | MAF

2.4 Strengthen collaboration between authorities, fishing industry and retailers to increase the availability of fish and seafood of good quality | MOFC

2.5 Survey and follow up readymade food and meals from restaurants and the service market | MOH, MAF

2.6 Restructuring of the tax on non-alcoholic beverages | MOF, MOH

2.7 Study the possibilities of the use of economic incentives to promote a healthy diet | MOH, MOF

2.8 Work to improve labelling of food products, including better nutritional declaration | MOH

2.9 Aim to introduce symbol labelling to make it easier to put together a healthy diet | MOH, MCE, MAF, MOFC

2.10 Follow up and continue to develop rules for the use of nutrition and health claims, fortification of foods and food supplements | MOH

2.11 Consider introduction of restrictions on advertising unhealthy food aimed at children and young people | MCE, MOH

2.12 Undertake a summary of knowledge about product placement and choice of foods at various types of sales outlets | MOH, MCE

03 NUTRITION IN EARLY STAGES OF LIFE

In working to promote a healthy diet in the population it is important to focus on good nutrition as early as the prenatal stage and further into infancy and early childhood. A good diet is of fundamental importance for a child's growth, development and health. In addition, diet and eating habits during this period have an impact on health later in life.

Diet during pregnancy is particularly important because it is of great importance for the mother's health and the child's development. Gaining too little or too much weight during pregnancy is associated with increased risk of complications for mother and child. Children with a high birth weight have an increased risk of overweight and diabetes later in life.

Women who are planning pregnancy or who are pregnant are often motivated to make changes in their diet. Consequently, it is very important for women to get good advice on diet during this period. The health authorities recommend folate supplements in connection with pregnancy.

Breastfeeding is one of the most effective measures for promoting health and preventing illness in the child and may also have a beneficial effect on health later in life. Although Norway ranks high compared with other countries, it is far to go before the breastfeeding recommendations are achieved. The duty of society and the health service is to make it as easy as possible for women to breastfeed. This applies both to maternal health care, maternity wards, child health clinics, primary care doctors and neonatal and paediatric wards. Child health clinics have a particularly important role in promoting breastfeeding and good dietary habits because of their close and early contact with the family.

Infants have relatively high requirement for vitamins and minerals in relation to their energy requirements. It is therefore important for the supplementary diet to be nutritious, varied and well composed. Separate national recommendations have been prepared for infant nutrition.

In Norway, daily vitamin D supplements in the form of cod liver oil for infants from the age of 4 weeks are recommended. Cod liver oil is also rich in marine omega-3 fatty acids, which play an important role in growth and neurological and mental development. Women and infants from certain non-western countries are overrepresented in terms of low vitamin D status. At the same time, overweight, obesity and type 2 diabetes are highly prevalent among women from some non-western countries. Information adapted to various immigrant groups in the languages of the major non-western immigrant groups should be developed.

SUBGOALS

- strengthen dietary guidance to women of fertile age and pregnant women
- facilitate that a higher percentage of infants can be exclusively breastfed for the first six months of life and continue to be breastfed until they are at least one year old
- facilitate a good diet for infants and young children
- strengthen guidance on breastfeeding, diet, food and meals to parents of infants and young children
- contribute to ensure that the marketing of breast-milk substitutes only takes place in line with international recommendations
- emphasise efforts towards women and children with non-western minority background

3. MEASURES AND MINISTRIES RESPONSIBLE

3.1 Offer updated informational material on breastfeeding, infant and young child nutrition | MOH

3.2 Continue and develop further the Baby-Friendly Initiative in Norway | MOH

3.3 Facilitate incorporation of the entire WHO Code of Marketing of Breast-milk substitutes in Norwegian legislation and ensure compliance with the Code | MOH

3.4 Maintain established maternity leave schemes for women and consider the possibility for paid breastfeeding breaks so that all women who wish may breastfeed in accordance with the health authorities' recommendations | MLSI

3.5 Revise and develop national recommendations on infant and young child nutrition and nutrition for premature babies | MOH

3.6 Strengthen guidance on nutrition for pregnant women by implementing professional guidelines for maternity care and publishing information materials | MOH

3.7 Continue the measures relating to the introduction of EU baby food directives in Norway | MOH, MAF

3.8 Work to establish a system for national breastfeeding statistics | MOH

3.9 Consider introducing a nationwide programme of free vitamin D supplements to infants with a non-western immigrant background | MOH

04 HEALTHY MEALS IN KINDERGARTENS AND SCHOOLS

The basis for child and adolescent nutrition is established at home, while kindergartens and schools also play an important role with respect to the eating habits of children and young people. Since many children eat several of their daily meals while they are in day-care or at school these meals represent a considerable part of their overall diet.

Facilitating good meals and healthy food and beverage programmes in kindergartens and schools is therefore important. This will help children and young people to establish health-promoting and good eating habits that they will hold on to later in life. In addition to covering purely physiological needs for energy and nutrients, meals are an important factor in the physical and psychosocial environment. Equal and healthy food programmes in kindergartens and schools is particularly important for children from homes where awareness of diet is low. Measures in these arenas will have an equalising effect on social inequalities in health.

In kindergarten challenges are mainly related to what is offered of food and beverages. Offerings of fruit and vegetables in particular should be increased. Too few wholegrain breads and cereals are served, and kindergartens that offer whole milk should serve low-fat types of milk. It would be advantageous to increase servings of fish and seafood since the consumption of fish among children is low. Birthdays and holidays are often celebrated with cakes and other sweet and fatty foods.

With respect to meals in primary and secondary schools, the trend since the early 1990s has in many ways taken a positive direction. Nevertheless, many challenges remain concerning the school food habits of children and young people. Among other things, this is related to lunch breaks and offerings of food and beverages. There are still schools that do not manage to organise the school day to allow pupils plenty of time to eat. The recommendation for lunch breaks is a minimum of 20 minutes.

The establishment of fruit and vegetable subscription programme to increase the consumption of fruit and vegetables among schoolchildren has been important. The subscription is a government-subsidised programme paid by parents and guardians. There are many indications that the pupils who need it the most are not participating. It will be important to establish a fruit and vegetable programme that can reach all pupils. Access to inexpensive and healthy food at school, either in the form of canteens or pantries, is important for ensuring that lower and upper secondary pupils can eat nutritionally beneficial meals during the school day.

The Directorate for Health and Social Affairs publishes guidelines for food and meals for kindergartens and primary and secondary schools. These are based on regulations for environmentally directed health care in kindergartens and schools.

Under the Kindergarten Act, kindergartens are to organise activities that promote the health of children and the framework plan for the content and duties of kindergartens emphasises the importance of a well-organised schedule that provides time for rest, physical activity and meals. Under Chapter 9a of the Education Act, School environment of pupils, pupils are entitled to a physical and psychosocial environment that promotes health, well-being and learning, which is the responsibility of the school's owners to follow up.

SUBGOALS

- facilitate kindergartens, schools and before- and after-school programmes with healthy and good dietary habits in children and young people through meals in line with the recommendations of health authorities
- facilitate children and young people in developing good attitudes to healthy dietary habits

4. MEASURES AND MINISTRIES RESPONSIBLE

4.1 Revise guidelines for food in kindergartens | HOD, KD

4.2 Prepare and offer educational tools and information materials relating to the revised guidelines for food and meals in kindergartens | HOD, KD

4.3 Introduce a programme for fruit and vegetables for all pupils in primary school | KD, HOD

4.4 Promote increased participation in the school milk programme in primary school | HOD, LMD, KD

4.5 Disseminate experiences from models developed in the Physical Activity and Meals in School project and collect and spread know-how about school breakfast programmes in lower and upper secondary schools | KD, HOD

4.6 Continue the work of spreading information about the health authorities' Guidelines for Meals in Primary and Secondary Schools | HOD, KD

4.7 Encourage school owners to prevent access to soft drinks and promote good access to cold drinking water | KD, HOD, KRD

4.8 Encourage school owners to strengthen food and meal programmes in before- and after-school programmes for schoolchildren | KD, HOD, KRD

4.9 Strengthen and coordinate inspection of food and meals in kindergarten, schools and before- and after-school programmes | HOD, LMD, FKD

05 FOOD AND HEALTH IN THE WORKPLACE

Diet and other living habits have a major impact on public health and consequently influence productivity and absence due to illness in the workforce. The workplace is therefore an important arena in public health policy. It is important to motivate workplaces to implement measures that promote healthy food habits and physical activity of workers. In this connection it is necessary to continue to develop initiatives on facilitating good food choices in the workplace, canteens and other food service operations, and to build capacity in nutrition among relevant personnel.

Workplaces in Norway are highly varied, ranging from sole proprietorships to large corporations. The health and social services sector and the industry represent the largest workplaces in terms of number of employees. These are workplaces with, to some degree, a high level of work pressure and considerable shift work, which require increased attention to facilitating healthy lifestyles and good habits. Changing organisational and working environment-related factors may contribute to better dietary habits. Shared meals have a positive social and environmental effect, and are used as community-building factors in efforts to reduce absenteeism.

The food offered at the workplace is an important part of the overall diet of many people. Canteens and food services under the auspices of the workplace and other food service sites that feed regular guests daily, affect the users' diet over time. They can influence food choices and make the most beneficial health choices easier through active marketing of tempting and healthy offerings. The Directorate for Health and Social Affairs has prepared normative recommendations for food and beverage offerings in canteens and other food service sites.

At any one time, around 700,000 persons are without a job for shorter or longer periods in Norway. Unemployment and uncertain work situations represent per se a health risk, and many people may need support and guidance to change their habits. Establishing nutrition, food and meal programmes for those outside the workforce is a particular challenge.

SUBGOALS

- contribute to healthy food and beverage offerings in the workplace
- stimulate the motivation of employees to adopt healthy habits and good food choices
- help employers to integrate dietary considerations in personnel policy

Canteens and food services under the auspices of the workplace and other food service sites that feed regular guests daily, has a great responsibility in affecting the users' diet over time.

5. MEASURES AND MINISTRIES RESPONSIBLE

5.1 Establish dialogue between working life participants and the health authorities to promote healthy dietary habits | MOH

5.2 Assess how dietary considerations can be addressed at work places | MOH, MLSI

5.3 Strengthen qualifications and access to tools on diet and health for personnel groups such as canteen employees, trade union representatives, managers and company health services | MOH, MAF, MOFC

5.4 Motivate vocational rehabilitation enterprises to include diet and physical activity with respect to people affected by workplace restructuring | MLSI, MOH

5.5 Develop and test low-threshold dietary schemes for people on long-term sick leave and others who are periodically outside the workforce | MOH

06 NUTRITION IN HEALTH AND SOCIAL CARE SERVICES

Nutrition plays a crucial role in both preventing and treating a number of illnesses and health problems such as diabetes, cancer, cardiovascular diseases, gastrointestinal illnesses, overweight/obesity, malnutrition, eating disorders, food allergies and food intolerance. The incidence of overweight and obesity is increasing in all age groups and in all segments of the population, which will be an increasing challenge for the health service to handle. Malnourishment in health institutions is also a challenge requiring greater attention.

One of the challenges for the health service is to help patients and users gain knowledge and understanding to be able to put together a complete diet when changes in the diet are necessary. It is also a challenge to provide a satisfactory food service to users of nursing and care services and patients in institutions. The health service shall also strengthen efforts in preventive and health-promoting initiatives. Key in this context is child health clinics and the school health service, dental health service, general practitioners/primary care doctors, and nursing and care services.

The primary task of child health clinics and the school health service is to carry out health-promoting and preventive work towards pregnant women, children and young people (0–20 years of age). Diet, infant nutrition and breastfeeding are key subjects in this work. The dental health service plays a central role in health-promoting efforts relating to diet, and should to a larger degree be involved as partners in local preventive work. The child health clinics, school health service and dental health service are low-threshold schemes that reach all parts of the population, and are service offerings that are important to strengthen with respect to reducing social inequality in health.

Today, general practitioners/primary care doctors have a special responsibility to identify at-risk persons, ensure individually-tailored guidance and follow-up and coordinate the follow-up of the patients. One of the main concepts in public health policy is to stimulate both the municipal health service and specialist health service to place more emphasis on preventive work in their services, particularly towards at-risk groups and people who have already developed an illness.

Many patients have a need for more thorough nutrition guidance than the municipal health service can offer and are referred to the specialist health service. Most health trusts currently have nutritionists, even though they are in a limited number. Better coordination of services in the municipal health service and between the municipal health service and specialist health service is an important mean for improving the follow-up of patients and users. In addition, there is a large potential for greater cooperation with NGOs and private actors.

Centres for Learning and Coping have gradually become an important forum for training patients with chronic illnesses, and nutrition is often included as a key part of training. Currently, many of these centres primarily offer services to chronic patient groups such as heart patients, patients with diabetes, asthma and allergies, cancer and rheumatic ailments, but many of the centres have also established services for overweight and obese persons.

Many users of nursing and care services have to some extent major nutrition problems including malnutrition, under nourishment and overweight or obesity. Some have a imbalanced diet with increased risk of malnutrition while others may for various reasons have problems eating. It is therefore crucial in preventive work to ensure

that both residents of institutions and persons living at home with chronic and or impaired functional capacity who receive municipal health and social services have a nutritionally and socially satisfactory diet. The municipality therefore has an important task in facilitating a good nutrition situation for users of nursing and care services.

Health care workers and kitchen staff must have dietary skills to provide sound dietary guidance and good food services in the health service.

SUBGOALS

- contribute to strengthening nutritional work in child health clinics and the school health service
- help patients in the primary health service and specialist health service receive tailored dietary guidance and treatment
- contribute to strengthening nutritional work in nursing and care services
- obtain knowledge about food and meals, diet and nutritional status of users/patients and skills of health workers

6. MEASURES AND MINISTRIES RESPONSIBLE

6.1 Consider how the municipalities in the longer term can provide satisfactory services in general and clinical nutrition | MOH

6.2 A focus on nutrition shall be included in the overall services offered in the specialist health service | MOH

6.3 **(6.3.1–6.3.6)** Prepare and implement professional guidelines and instructions for nutrition treatment | MOH

6.4 Prepare suitable diet and nutrition-related quality indicators in the health institutions and home-based services | MOH

6.5 Survey food services, diet and nutritional status of users of nursing and care services | MOH

6.6 Ensure that food services and facilitation of meals are included in authorities' inspection of the health service and nursing and care services | MOH

6.7 Develop further patient training programmes through Centres for Learning and Coping and other means | MOH

6.8 Continue to develop low-threshold dietary-related schemes | MOH

6.9 Develop informational materials and tools aimed at changing habits including diet for use by the health service, patients/users and relatives | MOH

07 DIET IN PUBLIC HEALTH EFFORTS AT THE LOCAL LEVEL

Social planning is a key instrument in all efforts to promote public health. Decisions that have an effect on public health are often taken outside the health sector's primary area of responsibility. It is therefore of major importance that public health measures employ an interdisciplinary and cross-sectoral approach.

A main strategy in public health policy is to strengthen public health work through alliance building and better anchoring in terms of policy and administration and in overarching planning systems in counties and municipalities. The Planning and Building Act is the municipalities' and county administrations' primary tool in community planning and development. There is broad agreement that public health must be a main consideration for all community planning and development. Collaboration forums for planners and health care workers are a prerequisite for these efforts. A solid basis is also a precondition for making public health work more systematic, continuous and comprehensive and for getting topics on the agenda where decisions are made. Partnerships for public health are an essential strategy here. Enabling the municipalities to implement targeted public health measures will require good nutrition-related indicators and data that can be included in the work with development of municipal health profiles (Kommunehelseprofiler).

Municipalities and counties have an important task in facilitating cooperation with organisations and private actors involved in public health initiatives. Public agencies dealing with the formative years and education, culture, health and social affairs, dental health and planning and environment are important actors in nutrition work. The Norwegian Food Safety Authority's regional offices are also important partners in nutrition work. Municipal centres promoting healthy lifestyle (Frisklivssentraler), where they exist, play a key role through their low-threshold schemes to the local population, both with regard to physical activity and diet. Senior centres are particularly important preventive and health-promoting venues that mean a lot for the well-being, food and exercise habits of elderly people who live at home, while youth centres are an important forum for reaching children and young people. It is a challenge to coordinate efforts and various subsidy schemes, and collect and disseminate knowledge and experience about good models and effective and efficient measures.

The political platform of the current government (Soria Moria declaration) calls for strengthening cooperation with NGOs in public health activities. Many activities are run by NGOs, based mainly on voluntary efforts and personal commitment. It is of importance that the authorities respect the special values that characterise volunteerism. Many NGOs wish to contribute to better nutrition and need tools to initiate activities at the local level. These organisations offer a diverse range of sports activities, outdoor recreation and culture programmes, and certain local activities also have a special focus on food, diet and health. The organisations establish important meeting places, organise courses and have activity programmes for children, young people, adults and the elderly. Working for healthy food choices in recreational arenas is an important component of nutrition activities in the NGO sector.

SUBGOALS

- contribute to better anchoring of and methods in public health work, including nutrition work in planning and budget systems in counties and municipalities
- contribute to systematic and interdisciplinary cooperation in nutrition as part of partnerships for public health in counties and municipalities
- contribute to publicising various subsidy schemes and other programmes that can contribute to strengthening local public health work in general and dietary work in particular
- contribute to offering healthy food and beverage alternatives at recreational arenas
- help the elderly receive offers of good and varied food at central meeting places

7. MEASURES AND MINISTRIES RESPONSIBLE

7.1 Emphasise nutrition considerations as part of public health initiatives in planning in counties and municipalities | MOH, MOE

7.2 Include examples of how nutrition can be addressed in guidelines for regulations and environmental impact studies pursuant to the Planning and Building Act | MOH

7.3 Facilitate capacity building in university college programmes for public health workers in primary and secondary education on how the Planning and Building Act can be a key instrument for local anchoring of nutrition initiatives | MOH, MER

7.4 Develop good indicators in nutrition and public health that are included in municipal health profiles | MOH

7.5 Continue nutrition and diet initiatives together with physical activity and anti-tobacco programmes as a priority focus in partnerships for public health | MOH

7.6 Collect, communicate and if necessary develop tools and models for nutrition activities | MOH, MAF, MOFC, MCE, MLSI, MOE

7.7 Coordinate and channel incentive funds from various national food, diet, physical activity and health programmes to local measures | MOH, MAF, MOFC, MCE, MLSI, MOE

08 CAPACITY-BUILDING IN NUTRITION-RELATED ISSUES

Several vocational and personnel groups have a direct or indirect effect on the diet and dietary habits of people. For example, regarding meals, employees of kindergartens and schools have a direct impact on the dietary habits of children. These groups need knowledge and skills in order to communicate knowledge about healthy diets and good food habits and to facilitate the practicalities of healthy meals.

Under the Knowledge Promotion Reform, the subject of home economics in primary school was changed to Food and Health. This is the main subject that addresses training in food, diet and health in compulsory education. The purpose of the subject is to give children and young people fundamental practical skills and theoretical knowledge about food, food preparation, meals and diet. The purpose of the subject is to enable pupils to think about the personal choices they make in regard to food and lifestyle. Furthermore, pupils shall learn how to compose a nutritionally sound and good diet in line with the health authorities' recommendations. Food and Health is a small subject with respect to the amount of classes taught, but is very important when it comes to giving pupils practical skills for daily life.

The professional qualifications of teachers who teach Food and Health have a bearing on the pupils' educational outcomes in the subject. In 2000 only about 30 % of the teachers who taught home economics in primary school stated that they had more than 5 credits in the subject. New elements in the Food and Health subject underline the need for strengthening the professional qualifications of teachers so that pupils are taught in accordance with the national curriculum.

Regarding the Knowledge Promotion Reform, the curricula for the education programmes in upper secondary education are also being revised. Of the vocational education programmes, Health and Social Care Studies and Restaurant and Food Studies are relevant with respect to food, diet and health. When the pupils who have taken these courses enter the workforce, they will have an influence on the diet of other people. It will be important to follow how the new nutrition and diet subjects are taught.

Nutrition-related tasks in health and social services cover dietary guidance and therapy, menu planning, food preparation and serving, follow-up of residents' and patients' nutritional status and facilitation of a pleasant eating environment. To strengthen nutrition-related activities in the health service it is important to have enough well-qualified personnel with special qualifications in nutrition. It is also of major importance for other health personnel groups to have fundamental knowledge of nutrition and diet in the prevention and treatment of diseases and the ability to translate this into practice. The personnel groups that have the greatest relevance in nutrition-related tasks, in addition to clinical dieticians, are doctors, nurses, public health nurses and other health care workers. Primary care doctors in the primary health service and public health nurses in child health clinics and the school health service play key roles in nutrition work in that they reach large segments of the population.

Other professional and personnel groups who are involved in professional nutritional challenges include dental health personnel, physiotherapists, occupational therapists and psychologists. Administrative dieticians and institutional cooks are important occupational groups with respect to diet planning and food services in health institutions and other places. Efforts are necessary so as to ensure that the personnel groups mentioned

receive relevant nutrition knowledge in education and offers of continuing and further education in nutrition.

When developing competence-raising measures it is necessary to think both long-term and short-term actions. In the short term there is a need to develop educational tools, and to offer seminars, conferences, courses and education in subjects relating to nutrition. The university colleges are crucial in this regard. In the long term efforts should be made to incorporate nutrition-related subjects in the basic education of relevant educational programmes.

SUBGOALS

- contribute to consistent knowledge and skills in food, food preparation, diet and health among young people
- contribute to good qualifications in food, diet and health among teachers in Food and Health
- contribute to adequate knowledge in nutrition and social inequalities in diet and health in relevant health personnel groups, and empower them to use this knowledge in their daily work
- contribute to more knowledge about the need for nutrition qualifications and how any needs can be covered

8. MEASURES AND MINISTRIES RESPONSIBLE

8.1 Offer a basic cookery book in free of charge to pupils at the lower secondary level and to education majors | MOH
8.2 Develop and offer web-based educational programmes for use in primary school | MOH, MAF, MOFC, MER
8.3 Encourage allocating resources for practical training in Food and Health | MOH, MER, MLR
8.4 Stimulate establishment of continuing and further education programmes in nutrition, diet and the Food and Health subject and disseminating information about them | MOH, MER, MLR
8.5 Assess needs and possibilities for strengthening nutrition in relevant curricula | MER, MOH
8.6 Ensure adequate qualifications in diet and nutrition in the nursing and care sector | MOH
8.7 Consider future needs for nutrition specialists in the health service | MOH

09 RESEARCH, MONITORING AND DOCUMENTATION

Like many other western countries, Norway faces a formidable task in preventing diet-related health problems and illnesses. As a part of health promotion and preventive work it is important to obtain new knowledge through research. This regards basic, clinical, epidemiological, food technology, and health economics research, research on the etiology of dietary habits of the population, what is needed to change them and the effect of interventions.

A good monitoring system for monitoring how diet and diet-related health problems and risk factors develop is fundamental for targeting, evaluating and renewing nutrition work. Updated knowledge about the composition of food and overall changes in the diet of the population and among at-risk groups is necessary for both nutrition and food safety work. The authorities who deal with public health and safe food production are the main users of this type of monitoring data. Furthermore, expert groups such as the National Nutrition Council and the Norwegian Scientific Committee for Food Safety need this type of data for professional nutrition and risk assessments. Research institutions, the health service, school system, food industry and NGOs are examples of other communities that use such dietary data.

The Directorate for Health and Social Affairs and the Norwegian Food Safety Authority have a joint system for food and dietary monitoring that includes a food database, dietary calculation system and dietary surveys. The food database and dietary calculation system are necessary tools for being able to estimate the intake of various nutrients. Analyses of food with respect to its nutritional content are continuously conducted and the results are published collectively in the national Food Composition Table (www.matvaretabellen.no).

National representative diet surveys that make it possible to estimate the intake of calories and nutrients by various age groups have been conducted since 1993. The plan is to repeat such surveys in these age groups every 10 years.

In addition to the major dietary surveys, annual statistics on national food supplies, Statistics Norway's consumer surveys of private households and various market surveys are used to describe changes in the Norwegian diet. The major Norwegian health surveys contribute much valuable data on diet-related health problems and risk factors. These surveys often also include questions on diet. Statistics Norway conducts regular interview surveys about health and living conditions among nationally representative samples of adults.

For several decades weight and height measured in the health surveys have provided reliable data on weight trends in the population. At the end of the 1990s to 2002 a major increase in weight was recorded. No new data have been obtained since then. Measuring weight and height is important because self-reported data often are biased. In the future it will be important to carry out regular measurements of the weight and height of children, young people and adults.

SUBGOALS

- provide increased knowledge about the relation between diet and health
- provide knowledge about the status of and development of diet and meal habits in Norway
- provide knowledge about circumstances that affect the population's and the food choices and dietary habits of various population groups.
- provide knowledge about effects of dietary measures, to improve the diet and to reduce social inequalities in diet
- provide knowledge about the cultural and social significance of meals to health
- provide the basis for Norwegian food production that addresses health considerations

9. MEASURES AND MINISTRIES RESPONSIBLE

9.1 Strengthen research on the relation between diet and health | MOH
9.2 Promote research to stimulate development of better and healthier products | MAF, MOFC, MOH, MTI
9.3 Continue and develop further monitoring of the population's diet | MOH, MAF, MOFC
9.4 Ensure expert studies and updated official recommendations | MOH

10 NUTRITION IN AN INTERNATIONAL PERSPECTIVE

The purpose of international cooperation is to contribute to solving health challenges that do not stop at the borders, to develop knowledge, to develop programmes and schemes for efficient disease prevention and treatment and to contribute to an improvement of the health situation in Norway's neighbouring countries and in other parts of the world. In this work, food and nutrition, in the widest sense, are essential components.

Cooperation with the EU is essential in the food and nutrition area. An important part of this collaboration applies to following up our obligations in regard to implementing food regulations in accordance with the EEA Agreement. Norway is participating in the development of EU food regulations, including labelling and fortification of food products. Norway is also participating in the EU Public Health Programme 2003–2008, which includes nutrition initiatives through the European Commission's Nutrition and Physical Activity Network.

The activities of the World Health Organization (WHO) are of major importance for international nutrition initiatives. Important nutrition-related activities also take place at the UN Food and Agricultural Organization (FAO) and UNICEF. It is crucial that the various UN organisations are well coordinated and do not duplicate efforts. In the nutrition area the UN Standing Committee on Nutrition (SCN) carries out important coordination work since the key UN organisations, a number of donor countries, NGOs and representatives of the food industry are participants. In recent years Norway has chaired the group of donor countries in the SCN.

WHO and FAO's joint Codex Alimentarius Commission is working on developing international standards for foods to promote health and fair trade. The organisation also plays a role in nutrition, particularly through its work on food labelling and standards for special foods such as breastmilk substitutes. The Norwegian Food Safety Authority is the Norwegian contact for the Codex Alimentarius Commission and the work has high priority.

The Nordic Council of Ministers for Fisheries and Marine Resources, Agriculture, Foodstuffs and Forestry (MR-FJLS) anchors Nordic cooperation on nutrition and food safety. In a number of cases this is taking place in cooperation with the Nordic Council of Ministers for Social Security and Health Care (MR-S). Major initiatives in the future include food labelling, research cooperation, promotion of Nordic cuisine and follow-up of the Nordic Plan of Action for Better Health and Quality of Life through Diet and Physical Activity. Nordic cooperation is important both for exchanging information among the Nordic countries, and for cooperation on inputs and attitudes to ongoing processes in Europe and globally.

Norway will actively work with other countries and international organisations on nutrition issues and will work to increase attention to nutrition in aid and development cooperation. The Norwegian Agency for Development Cooperation (NORAD) and the Directorate for Health and Social Affairs have signed a framework agreement to bring Norwegian expertise in the area of health and social services into Norwegian development cooperation. Nutrition is a very important component in priority areas in Norwegian development work, such as efforts to improve child health and reduce child mortality and infectious diseases. Norway is contributing economic support as well as know-how. Norwegian experts have much to contribute with respect to specific areas of expertise such as nutrition and breastfeeding.

SUBGOALS

- contribute actively in cooperation with other countries and international organisations on nutrition issues
- strengthen the focus on nutrition in aid and development cooperation
- raise awareness that breastfeeding and nutrition are an important component in priority areas, such as actions to improve child health and reduce child mortality

Nutrition is very important in priority areas, such as efforts to improve health of mother and child and reduce child mortality.

10. MEASURES AND MINISTRIES RESPONSIBLE

10.1 Participate actively in WHO's work on nutrition, globally and regionally | MOH

10.2 Contribute actively to the work of the UN Standing Committee on Nutrition | MFA, MOH

10.3 Contribute actively to Nordic and Nordic-Baltic cooperation | MOH

10.4 Ensure that nutrition measures and assessment of nutritional consequences are included as an element of aid and development cooperation | MOH, MFA

PART IV:

FOLLOW-UP WITH ECONOMIC AND ADMINISTRATIVE CONSEQUENCES

The Norwegian Action Plan on Nutrition will be implemented in the five-year period 2007–2011 within the scope of the annual state budget, grant schemes and relevant parliamentary documents. Measures that require additional allocations will be discussed during the annual budgetary negotiations. An interministerial coordination group will follow up the Action Plan. The different ministries are responsible for follow-up within their own area of policy, but several measures will require the cooperation and collaboration of several ministries. New measures may be added during the period should new knowledge and developments so warrant.

The Directorate for Health and Social Affairs will serve as the secretariat of the coordination group, with responsibility for following up most of the measures within the scope of the Ministry of Health and Care Services. State competent authorities, municipalities and counties are key actors in implementing measures. The NGO and private sectors will be invited to cooperate on the follow-up of the plan.

A fundamental part of follow-up and evaluation is to continue to develop the indicators for monitoring dietary changes, including the different socioeconomic groups.

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